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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LIN, WEN TAI

ART UNIT

PAPER NUMBER

2154

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/893,170

Applicant(s)

CHEN ET AL.

Examiner

Wen-Tai Lin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/7/02, 10/9/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-22 are presented for examination.
2. Claims 17 and 18 are objected to because they are identical claims.
Cancellation or modification of one of the claims is required in response to this office action.
3. Claims 12 and 15-18 are objected to because it is not clear what is meant by "watermark". That is, at the first occurrence in claim 12, the term is being used for "identifying a state within a server store ...", at the second occurrence in claim 12, a prior watermark is being used to "identifying a prior state of the watermark", while in claim 15, watermark is being used for "identifying a position with the second data store". Clarification is required in response to this office action.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5, 12, 19 and 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Kloba et al.[U.S. Pat. No. 6341316].

6. As to claim 1, Kloba teaches the invention as claimed including: a computer-implemented method for recovering from a failed synchronization session between a mobile device [Abstract; 106A, 106B, Fig.1A] and a server [e.g., 128A, Fig.1A], comprising:

a) receiving a client request for a synchronization session [170A, 170B, Fig.1H1];

b) determining whether a prior synchronization session failed [170D, Fig.1H1];

and c) if the prior synchronization session failed [170F – 170H, Fig.1H1; 170I-170L, Fig.1H2; Fig.63B],

1) creating a server request based on the client request and on a synchronization state associated with the failed prior synchronization session [170G-170H, Fig.1H1; col.25, lines 12-17; col.37, lines 11-27];

2) sending the server request to the server for processing;

3) receiving a server response from the server based on the processing of the server request at the server [172C-172D, Fig.1I1; col.19, lines 9-15; note that the communications (in the nominal form of request and response – see also steps in

Fig.3A) between the synchronization module and a designated provider (e.g., 128A) must occur in order to form the instructions needed for updating the client's data];

4) modifying the synchronization state based on the server response and the client request [172E – 172F, Fig.111;];

5) creating a client response based on the server response; and 6) sending the client response to the mobile device [170I-170J, Fig.1H2].

7. As to claims 2-3, Kloba further teaches that the client request includes a sync key [i.e., the data marker] that updates to a pre-determined value each time the client request for the synchronization session is successful, the synchronization state includes a last sync key and determining whether the prior synchronization session failed comprises comparing the sync key in the client request with the last sync key, wherein the prior synchronization session is determined to have failed if the sync key in the client request is one less than the last sync key [col.18, lines 10-67].

8. As to claims 4-5, Kloba further teaches that the client request includes a manifest comprising changes to a mobile data store after a prior successful synchronization session [col.19, lines 37-53; 306-310, Fig.3A; note that the updated information must have included an action addition or deletion (which constitutes a client's update manifest as defined in Applicant's specification) because the client only sends delta information to the synchronization module], wherein the changes include changes from a prior manifest associated with the synchronization session that failed.

9. As to claim 12, Kloba further teaches that the synchronization state includes a last manifest associated with a manifest in the client request for the prior synchronization session that lists changes to a mobile data store after a prior successful synchronization session, a watermark [e.g., a fingerprint represented by a hash value] identifying a state within a server store at which the server has synchronized the server store, a prior watermark which identifies a prior state of the store [Fig.4B; col.25, lines 11-30].

10. As to claims 19 and 21-22, since the features of these claims can also be found in claims 1-5 and 12, they are rejected for the same reasons set forth in the rejection of claims 1-5 and 12 above.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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12. Claims 6-11, 13-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kloba et al.(hereafter "Kloba")[U.S. Pat. No. 6341316], as applied to claims 1-5, 12, 19 and 21-22 above.

13. As to claim 6, Kloba does not specifically teach the server request includes an update manifest, the update manifest comprises one or more objects and an update action associated with each of the one or more objects, the update action being based on the client request and the synchronization state.

However, based on the fact that because the client only sends delta information to the synchronization module [col.19, lines 37-53; 306-310, Fig.3A] and that the data stored at the synchronization module needs also be synchronized with the content provider (or database) [col.19, line 54 – col.20, line 3], it is obvious that similar delta information (or more specifically, an update manifest) could be formed between the synchronization module and the content providers because by doing so traffic between the synchronization module and the providers would be significantly reduced.

14. As to claims 7-11, Kloba further teaches that the client request includes a manifest and at least one of the one or more objects in the update manifest does not have a corresponding object in the manifest of the client request [note that, by default, this must be true otherwise there would be no need for synchronizing the deltas from client with the content providers],

wherein, based on a current action specified in the client request and a last action specified in the synchronization state, the update action can be identical to the current action [i.e., when the previous synchronization was successful], or identical to the last action [i.e., when the previous synchronization failed], or different than the current action and the last action [e.g., synchronization module may determine that no action is needed because the relevant objects are identical at both ends].

15. As to claim 13, Kloba does not specifically teach storing the synchronization state to a non-volatile storage media. However, given the fact that Kloba's state information is flexible list of concerned factors [col.23, line 63 – col.24, line 29], it is obvious to store the state information in a non-volatile storage media because it is more economical to save a large amount of items in a disk than in a main memory.

16. As to claims 14-18 and 20, since the features of these claims can also be found in claims 1-13 and 19, they are rejected for the same reasons set forth in the rejection of claims 1-13 and 19 above.

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

LaRue et al.	[U.S. Pat. No. 6460051];
Peng	[U.S. Pat. No. 6317754]; and
LARUE et al.	[U.S. PGPub 20020156798].

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18. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 days from the mail date of this letter. Failure to respond within the period for response will result in ABANDONMENT of the application (see 35 U.S.C. 133, M.P.E.P. 710.02, 710.02(b)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (703)305-4875. The examiner can normally be reached on Monday-Friday (8:00-5:00) .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703)872-9306 for official communications; and

(703)746-5516 for status inquires draft communication.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Wen-Tai Lin

September 2, 2004

Wen-Tai Lin
9/2/04